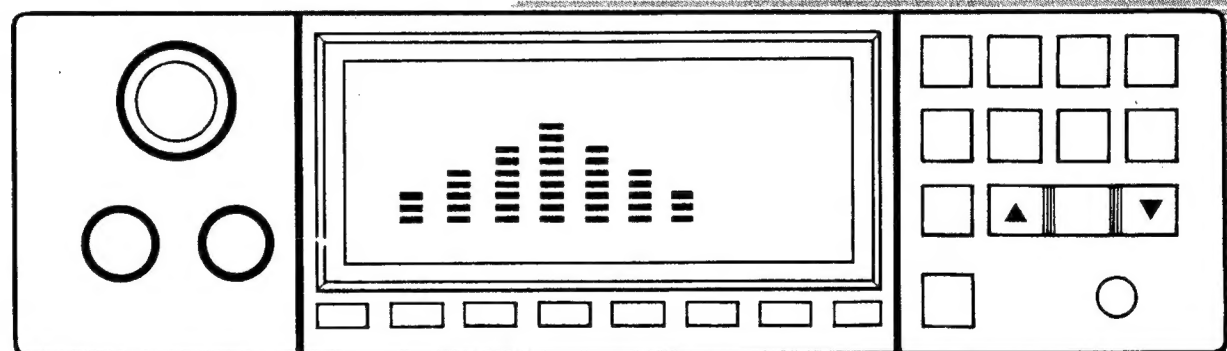




# Sherwood

## EQA-380

### COMPUTER-CONTROLLED ELECTRONIC GRAPHIC EQUALIZER AND AMPLIFIER



## INSTALLATION and OPERATION MANUAL



## Congratulations on your Purchase!

Your new high fidelity Equalizer-Amplifier is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your unit and help insure a trouble free installation.

## Features

- Computer controlled graphic equalizer system.
- 5 presets user memory and 3 presets maker memory (POP, CLASSIC, ROCK)
- Instant flat response.
- Memory backup retains preset equalizations.
- Full electronic short circuit and thermal protection.
- High-Q 7 band equalizer with center frequencies of 60 Hz, 125 Hz, 250 Hz, 500 Hz, 1 KHz, 3.5 KHz, 10 KHz.
- Automatic remote power ON/OFF control.
- Front/Rear fader control.
- Excellent night illumination.
- Balance for left and right stereo channels.
- LCD (Liquid Crystal Display) pannel displaying for spectrum analyzer or power output level, preset No., and other function indicators.
- Low/High input sensitivity switch.
- CDP input.

## Unpacking and Installation

Please unpack your unit carefully. We recommend that you save the carton and packing material. They will be helpful should you ever need to move your unit and may be required if your ever need to return it for service.

Your unit comes with a complete kit that includes two mounting brackets, a mounting strap, bolts, washers, connector assembly with the wires and a fuse, a shield cable with the plugs. Look at the installation diagrams and make sure that you have all the necessary parts. Then begin installation according to the following manner.

1. For the first time, decide where you are going to install the unit near your seat for easy control.
2. Secure the mounting brackets to the sides of the unit using the screws (4×8 mm) supplied. You can adjust the mounting position (slant, up or downward).
3. Once the proper location is secured, use a felt tip pen to outline the 4 holes to be drilled for mounting.
4. Drill 4.7 mm (3/16") diameter on or under the dashboard if you wish to mount the unit using the tapping screws supplied or drill 5.5-6.0 mm (7/32") diameter if you wish to use the bolts and nuts supplied, then secure the unit (Fig. 1 & Fig. 2)
5. If you feel necessary to fasten the rear of the unit, utilize the backstrap supplied refering to the Fig. 1.

NOTE: Before installing this unit, set the INPUT SENSITIVITY selector on the right side panel.

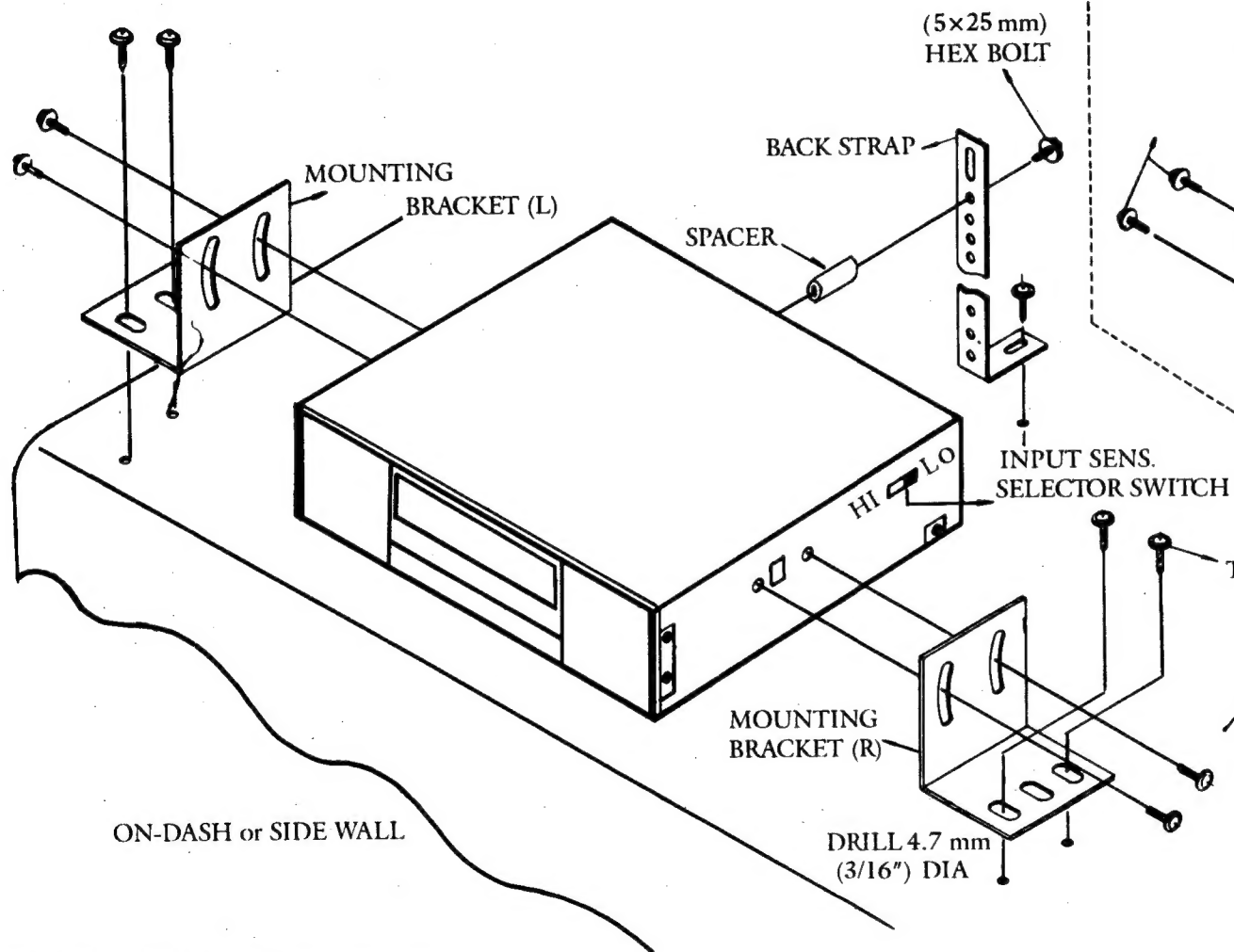
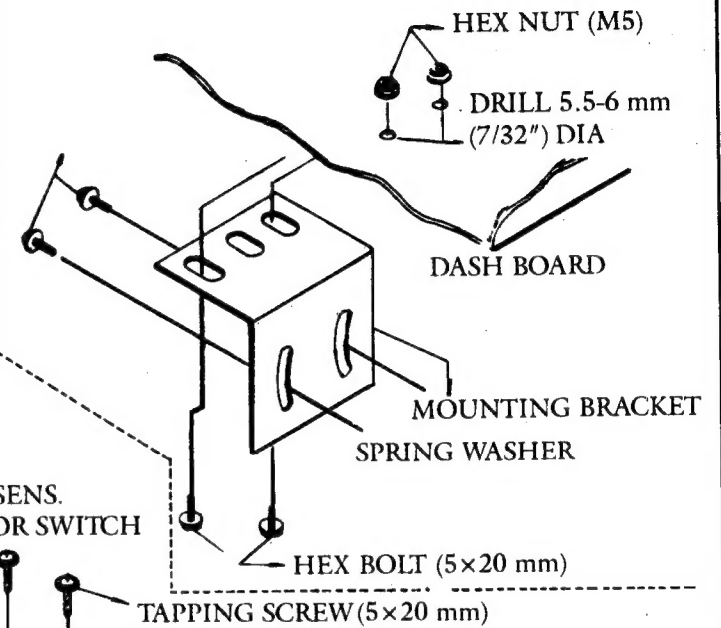


Fig. 1 On-Dash or side wall mounting

Fig. 2 Under-Dash mounting



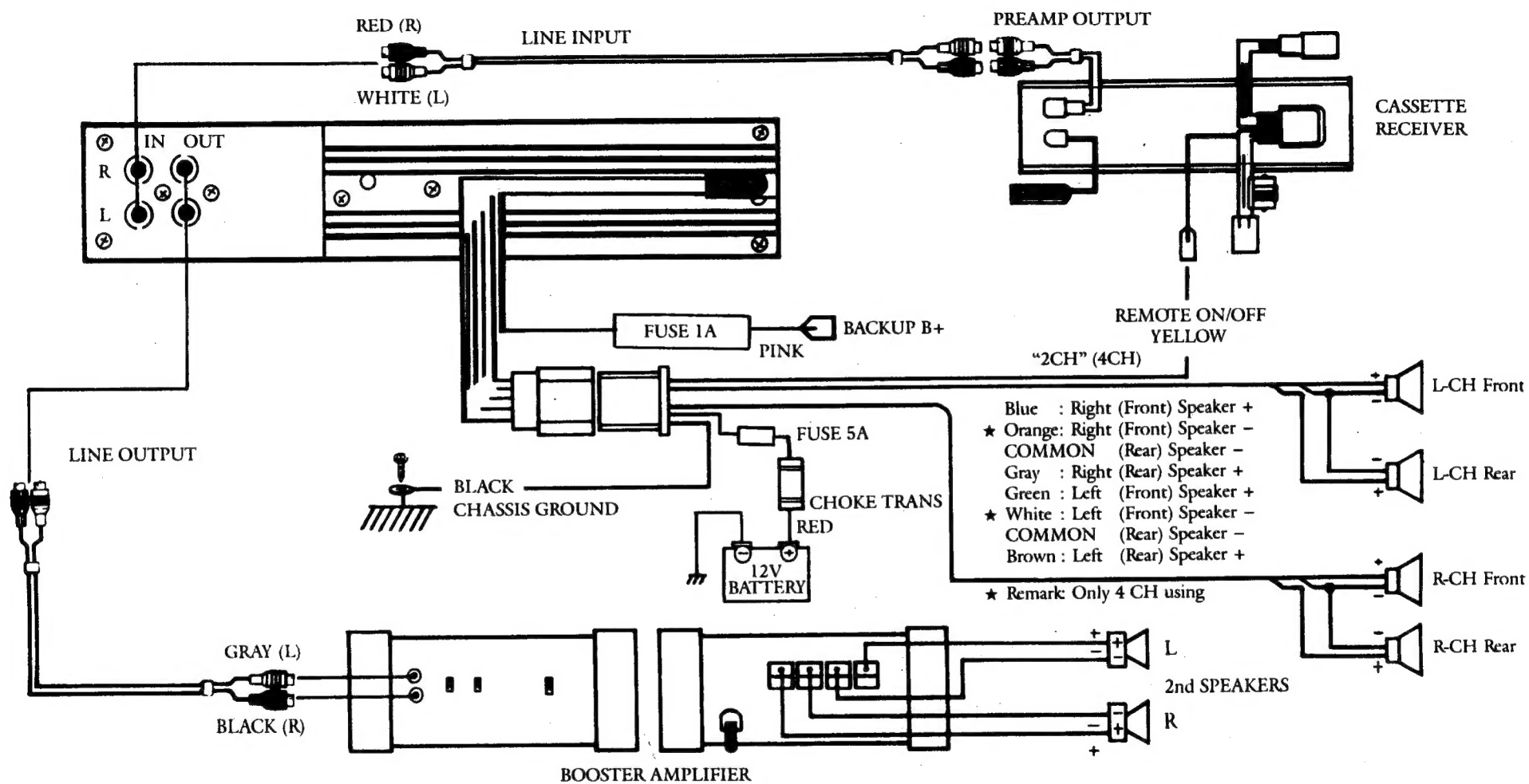


Fig. 3 Connection diagram

## Connections (Fig. 3)

### Connection Precautions

- Do not bring the connecting cord near parts whose temperature will rise when the vehicle is driven.
- Connect the connectors securely so that they are locked into position. Improper connection can result in noise and no operation.

Before connecting any wire, turn the ignition key and the power switch of your main cassette receiver off.

### 1. Power supply connections:

- 1) Secure the ground lead (Black) to the chassis by using a screw already attached to the chassis of the car.  
If a screw is not available near your amplifier, drill 4.7 mm (3/16") diameter on the chassis of the car and secure the ground lead using a self tapping screw and a spring washer provided with the unit.
- 2) Connect the Red wire (Battery +) to the positive lead directly from the battery.  
Do not connect this lead to the ignition key controlled positive lead.
- 3) Connect the Yellow wire (Remote ON/OFF) to the remote power control lead (or power antenna control lead) of your main cassette receiver.  
Then the power of this unit will be automatically controlled by the power switch of your main cassette receiver.

### 2. Speaker connections:

Connect the wires from the speaker plug with the wires from your main or 2nd speakers.

This unit is designed for use with either TWO or FOUR speakers.

- 2 speaker system: Connect the wires from the FRONT speaker with the wires from your speakers.
- 4 speaker system: Connect the wires from the FRONT speaker with the wires from your front speakers and the wires from the REAR speaker with the wires from your rear speakers respectively.

**CAUTION: Do not comonly ground the negative wires of the speakers, because the output is of floating grounded design.**

For all speaker connections, make sure that the phasing is correct. The left and right channels of the amplifier must be connected to the proper speakers and also all positive to positive and negative to negative wire connections must be maintained. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

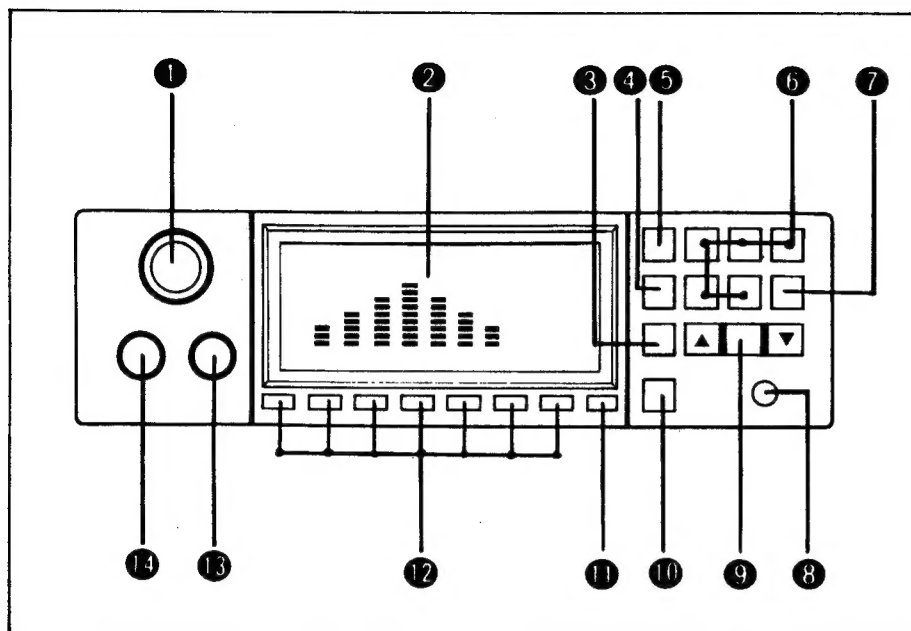
### 3. Input connections:

Connect the LINE INPUT jacks of this unit to the preamp output jacks of your main cassette receiver with the shielded cable provided with this unit. The red colored plug will carry the right channel signal and the white colored plug is for the left channel.

### 4. Line output connections:

If you have 4 speaker system and your main cassette tuner or receiver does not have enough power output, you may provide another power amplifier for the 2nd speaker system. In this case, connect the LINE OUTPUT jacks of this unit to the high sensitive input of your 2nd amplifier with the shield cable.

# Controls & Operations



## 1. Fader control

For balancing the relative sound level of the front and rear speakers in 4 speaker system. Slide the control down for reduces the volume from the front speakers connected to the speaker outputs of this unit, and up for reduces the volume from the rear speakers connected to another amplifier through the line output of this unit.

If you do not use the line output, set this control at the center or rotate counterclockwise fully.

## 2. Display panel

This display panel indicated the status of the operations for

easier control of the GRAPHIC EQUALIZER, SPECTRUM ANALYZER, EQ MEMORY, EQ PRESET, SIGNAL STRENGTH METER, GEQ, SPA, POP, CLA, RCK, etc.

## 3. Rock'n roll(R) button

Press to change the operation Rock'n roll music.

RCK indicator lights on the display when the Rock operation is activated.

## 4. Classic (C) button

Press to change the operation Classical music.

CLA indicator lights on the display when the Classic operation is activated.

## 5. Pop (P) button

Press to change the operation Pop song.

POP indicator lights on the display when the Pop operation is activated.

## 6. EQ Preset buttons

This system enable you to memorize 5 equalizer setting. These soft touch buttons are used for the Memory and Recall of the equalizer setting.

## 7. EQ Memory button

EQ Memory is used for entering your settings of the 7 band digital equalizer into 5 EQ preset memories. When touch EQ Memory button, memory indicator (ME) will lights 5



seconds and it allows you to enter the programmed frequency response into any number of the preset buttons.

#### **8. CDP (Compact Disk Player) jack**

If you are playing the CDP, your CDP output plug insert to this jack.

#### **9. EQ Level UP/DOWN buttons**

These buttons provide to adjust the EQ Level of 7 band equalizer by 2 dB/step from -10 dB to +10 dB. It will be active when one of EQ FREQUENCY selector is touched.

#### **10. GEQ/SPA (G/S) display mode selector.**

The LCD of the equalizer will display either the spectrum of the sound (SPA) or the setting of the graphic (GEQ) and it can be selectable with this selector:

**GEQ (Graphic Equalizer)** – In this mode, LCD displays the setting of 7 band equalizer. This mode is useful in adjusting 7 band equalizer and confirming the setting.

**SPA (Spectrum Analyzer)** – In this mode, LCD displays the spectrum of the sound outputs in 7 bands combining the left and right channels.

#### **11. FLAT button**

When you touch this switch, every program source is in flat tone curve.

#### **12. Equalizer frequency selector**

If you want to adjust the equalizer level of a desired frequency (60 Hz, 125 Hz, 250 Hz, 500 Hz, 1 KHz, 3.5 KHz, 10 KHz), touch one of these buttons, then an EQ level indicator of a desired frequency will blink for 5 seconds and it allows you to adjust the equalizer level with the UP or DOWN EQ LEVEL button (⑨) during this interval.

#### **13. Balance control knob**

Rotate to adjust the balance between left and right speakers. At center detented position, the levels of both speakers are equal.

#### **14. Volume control knob**

Rotate clockwise to increase volume, counterclockwise to decrease.

#### **Input sensitivity selector (right side panel in position):**

Leave the input sensitivity switch to the HIGH position as, factor-setting if the line input jacks of this unit are connected to the preamp outputs of your main cassette receiver.

If you wish to use it as a power booster, connect the line input jacks of this unit to the speaker outputs of your main cassette receiver and set the input sensitivity switch to the LOW position, in this case:

**NOTE THAT YOU CAN NOT CONNECT THE LINE INPUTS OF THIS UNIT TO THE SPEAKER OUTPUTS OF YOUR MAIN CASSETTE RECEIVER IF THE OUTPUT IS OF FLOATING GROUNDED DESIGN. CONSULT YOUR DEALER IF IN DOUBT.**



# SPECIFICATIONS

NOTE: Specification & design subject to change without notice for improvements.

## ☐ AMPLIFIER SECTION

- ☐ Average Power Output/CH. into 4 Ohms  
@ 30 Hz-20 KHz 0.5% THD — 12 Watts, (4CH: 3.5W)  
@ 1 KHz, 10% THD — 20 Watts, (4CH: 6W)
- ☐ Frequency Response (-3 dB) — 15 Hz ~ 50 KHz
- ☐ Equalizer Range at 60 Hz, 125 Hz,  
250 Hz 500 Hz, 1 KHz, 3.5 KHz, 10 KHz —  $\pm 10$  dB
- ☐ Signal to Noise Ratio (IHFA) — 85 dB
- ☐ Input Sensitivity/Impedance, High — 250mV/10K Ohms  
Low — 750mV/10K Ohms
- ☐ Line Output Level/Impedance — 350mV/4.7K Ohms
- ☐ CDP Input Sensitivity — 150mV

## ☐ GENERAL

- ☐ Operating Voltage — 14.4V (10.8V ~ 15.6V allowable)  
Negative Ground
- ☐ Speaker Impedance — 4 ~ 8 Ohms
- ☐ Dimension Chassis W — 178 mm  
H — 50 mm  
D — 140 mm
- Front Panel W — 180 mm  
H — 50 mm  
D — 20 mm
- ☐ Net Weight — 1.4 Kg
- ☐ Fuse,  
Main — 5A Normal Blow  
Back up — 1A Normal Blow

## ■ OWNER'S RECORD

Serial No. ....  
Date of Purchase .....  
Dealer .....

